

WHAT IS CLAIMED:

1. A composition comprising an antisense oligonucleotides directed against vascular endothelial growth factor (VEGF), wherein said antisense oligonucleotide is UGGCTTGAAGATGTACTCGAU (SEQ ID NO: 34).

2. The composition of Claim 1 further comprising another active agent.

3. The composition of Claim 2 wherein said active agent is a chemotherapeutic such as Taxol.

4. The composition of Claim 1 further comprising one or more antisense oligonucleotides antisense oligonucleotides directed against vascular endothelial growth factor (VEGF) and which inhibit the proliferation of cells exhibiting autocrine VEGF activity at an IC₅₀ concentration of between about 0.5 to about 2.5 micromolar.

5. The composition of Claim 4, wherein the IC₅₀ concentration is less than or equal to about 1.5 micromolar.

6. The composition of Claim 5 wherein said antisense oligonucleotide inhibits proliferation of cultured melanoma cells at an IC₅₀ concentration of less than or equal to about one micromolar.

7. The composition of Claim 4 wherein said cells are ovarian cancer cells, melanoma cells, Kaposi's sarcoma cells prostate cells or pancreatic cancer cells.

8. An antisense oligonucleotide having the sequence UGGCTTGAAGATGTACTCGAU (SEQ ID NO: 34).

9. A method for inhibiting cancer cell proliferation or angiogenesis comprising comprising contacting said cell with an antisense oligonucleotides directed against vascular

endothelial growth factor (VEGF), wherein said antisense oligonucleotide is UGGCTTGAAGATGTACTCGAU (SEQ ID NO: 34).

10. The method of Claim 9, wherein said cell is an ovarian cancer cells, melanoma cells, Kaposi's sarcoma cells prostate cells or pancreatic cancer cell.

5 11. The method of Claim 9, further comprising contacting the cancer cell with one or more antisense oligonucleotides directed against vascular endothelial growth factor (VEGF) wherein said antisense oligonucleotide inhibits proliferation of cells exhibiting autocrine VEGF activity at an IC₅₀ concentration of between about 0.5 to about 2.5 micromolar.

10 12. The method of Claim 11, wherein the the IC₅₀ concentration is less than or equal to about 1.5 micromolar.

13. The composition of Claim 12 wherein the IC₅₀ concentration is of less than or equal to about one micromolar.

14. The method of Claim 9 wherein said antisense oligonucleotide is encapsulated in a liposome.

15 ~~15~~. A method of assessing the therapeutic potential of a candidate agent to inhibit cancer cell proliferation or angiogenesis, said method comprising: (i) contacting cells exhibiting autocrine growth activity with at least one candidate and (ii) measuring the level of VEGF expression or activity or cell growth, wherein an inhibition in VEGF expression or cell growth is indicative of the candidate agent's therapeutic potential.

20 16. The method of Claim 15, wherein said cells are Karposi's sarcoma cells, ovarian cancer cells, prostate cancer cells, pancreatic cancer cells or melanoma cells.

17. The method of Claim 16, wherein said candidate agent is an antisense oligonucleotide.

18. A prognostic assay for a subject afflicted with a disease involving abnormal cellular proliferation or angiogenesis, comprising::

(i) isolating a biological sample a subject afflicted with a disease involving abnormal cellular proliferation (e.g., cancer) or angiogenesis; and (ii) evaluating said sample for autocrine

5 VEGF activity or VEGF expression or VEGF receptor expression, wherein autocrine activity is indicative of a poorer prognosis for said